

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS —P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/681,838	06/14/2001	Peter Jurgen Rohl	RD-28355/USA 2850		
:	7590 12/21/2005	EXAMINER			
GENERAL ELECTRIC COMPANY (PCPI)			CRAIG, DWIN M		
C/O FLETCH		,			
PO BOX 692289			ART UNIT	PAPER NUMBER	
HOUSTON TY 77260-2280			2123		

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application	cation No. Applicant(s)						
		09/681,83	8	ROHL, PETER JURGEN					
		Examiner		Art Unit					
		Dwin M. C		2123					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR R CHEVER IS LONGER, FROM THE MAILIN and the provisions of 37 Cl SIX (6) MONTHS from the mailing date of this communication be period for reply is specified above, the maximum statutory p are to reply within the set or extended period for reply will, by are ply received by the Office later than three months after the and patent term adjustment. See 37 CFR 1.704(b).	IG DATE OF TH FR 1.136(a). In no eve on. period will apply and wil statute, cause the appli	IS COMMUNICATION nt, however, may a reply be tirr I expire SIX (6) MONTHS from cation to become ABANDONE	N. nety filed the mailing date of this c D (35 U.S.C. § 133).					
Status									
1)[🛛	Responsive to communication(s) filed on	10/6/2005.							
2a)⊠	This action is FINAL . 2b) This action is non-final.								
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposit	ion of Claims								
4)⊠	Claim(s) 1-20 is/are pending in the applica	ation.							
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)⊠	☑ Claim(s) <u>11-20</u> is/are allowed.								
6)🖾	Claim(s) <u>1,2 and 6</u> is/are rejected.								
	Claim(s) <u>3-5 and 7-10</u> is/are objected to.								
8)∐	Claim(s) are subject to restriction a	and/or election re	equirement.						
Applicat	ion Papers								
9) The specification is objected to by the Examiner.									
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority (under 35 U.S.C. § 119								
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of:									
	1. Certified copies of the priority documents have been received.								
	 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 								
	application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.									
Attachmen	t(s)		_						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94	Ω\	4) Interview Summary Paper No(s)/Mail Da						
3) Infor	re of Dransperson's Patent Drawing Review (P10-944) mation Disclosure Statement(s) (PTO-1449 or PTO/S rr No(s)/Mail Date		5) Notice of Informal P 6) Other:		O-152)				

Application/Control Number: 09/681,838 Page 2

Art Unit: 2123

DETAILED ACTION

1. Claims 1-20 have been presented for reconsideration based on Applicant's arguments and amended claim language.

Specification

2. The Examiner thanks the Applicant for amending independent claim 11 and the Examiner withdraws the previous objection to the same.

Response to Arguments

- 3. Applicant's arguments presented in the 10/6/2005 responses have been fully considered. The Examiner's response is as follows.
- 3.1 As regards Applicant's arguments concerning the rejection of claims 1, 2 and 6 under 35 USC § 102(e). The Applicant unpersuasively argued that *Beauchamp* does not anticipate claims 1, 2 and 6. The Examiner respectfully traverses Applicant's arguments. *Beauchamp* discloses the use of a master model; Abstract "A parametric geometric representation (i.e., a master model) of the article is created in terms of geometric using a computer program", and translating a context model into an engineering analysis model that is compatible with an engineering analysis program; Col. 6 lines 5-9, "Examples of manufacturing analysis methodologies include models of sheet metal forming, process models of casting process, forging processes models, assembly tolerance models, etc." The Examiner respectfully directs the Applicant's to figures 3-7.

 Beauchamp meets the call of claims 1, 2 and 6 and discloses the required teachings such that the metes and bounds of Applicant's expressly claimed limitations are anticipated by the cited reference.

Art Unit: 2123

3.2 As regards Applicant's arguments concerning the rejections of claims 3-5 and 7-10 under 35 USC § 103(a), the Examiner withdraws the rejections of claims 3-5 and 7-10. The Applicant is correct that *Beachamp* is not available for obviousness type rejections because of the 103(c) shield.

3.3 As regards the Applicants arguments regarding the rejections of claims 11-20 under 35 USC § 103(a). Applicant persuasively argued on page 10 of the 10/6/2005 responses that, "This reference describes only "tooth meshing" (see the passage relied upon by the Examiner), which bears no relation whatsoever to a finite element mesh." The Examiner withdraws the 35 USC § 103(a) rejections of claims 11-20.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Application/Control Number: 09/681,838 Page 4

Art Unit: 2123

Claims 1, 2 and 6 are rejected under 35 USC § 102(e) as being anticipated by 6,434,441 4. Beauchamp et al.

- As regards Independent Claim 1 the Beauchamp et al. reference discloses Automatically 4.1 analyzing an article of manufacture comprising; (Abstract), a) providing a master model and a context model specification; (Figure 3 Block 2 and Col. 4 line 10 "Create a parametric geometrical representation of the part (Master Model)...), b) creating a context model from said master model and said context model specification; (Figure 3 block 1, Col. 3 lines 62-65), c) translating said context model into an engineering analysis model compatible with an engineering analysis program; (Col. 4 line 16 defined as a computer model/representation usable within a Computer Aided Design Software, (commercially available examples of which are Unigraphics, ProE, IDEAS, etc.)), d) executing said engineering analysis program to generate a performance estimate from said engineering analysis model and; (Figure 4 block 215 Col. 6 liens 45-65 and Col. 9 lines 42-50), e) optionally modifying said master model to improve said performance estimate. (Col. 10 lines 14-28).
- As regards dependent Claim 2 the Beauchamp et al. reference discloses context models 4.2 and associative copies from the Master Model (Figure 4 items 213 and 214).
- 4.3 As regards dependent Claim 6 the Beauchamp et al. reference discloses the functional equivalent of a macro file (Figure 3 Block 7).

Allowable Subject Matter

5. Claims 11-20 are allowed. Art Unit: 2123

5.1 Claims 3-5 and 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5.2 The following is a statement of reasons for the indication of allowable subject matter:

As regards independent claim 11, the following limitations, in combination with other limitations are neither anticipated nor made obvious by the prior art, "creating a context model from said geometric description and said CAD model by trimming, tagging and chunking;" in combination with "executing an engineering analysis program using said mesh to generate a performance estimate."

Conclusion

- 6. Claims 1-20 have been presented for reconsideration. Claims 11-20 are allowed. Claims 3-5 and 7-10 are objected to. Claims 1, 2 and 6 are rejected.
- 6.1 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2123

6.2 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC

Printers Evaminer